

ABSTRACT

The present invention is designed to complement the existing transportation infrastructure in order to alleviate ever-worsening traffic congestion in problematic areas by minimizing the impact of driver "bunching" habits and/or external events that lead to congestion problems. Events alleviated by the present invention may happen at naturally occurring roadway infrastructures such as merges, lane shifts, and exits, and under conditions like rush hour, accidents, stand-stills, and HOV lane activation times. Further, vehicles allowing their speed and spacing to be controlled should have access to high-flow lanes. This invention will best and most safely be implemented at low speeds when congestion is most problematic and bunching habits prevent the dissipation of gridlock. In particular embodiments, the invention will regulate multiple vehicle accelerations (non-negative acceleration) once a low threshold speed has been reached through the transmission of signals to receivers in properly equipped vehicles. The exclusive non-negative acceleration control system simplifies the manufacturing, safety and redundancy necessary for implementing such a system and is commercially viable.